One Big Government Irrigation Project Soon to be Under Way in Utah

Four years after the enactment of the national irrigation law Utah is given a promise to share in the benefits of the law although the benefits are still three years in the future. It cannot be denied that this tardiness is a source of disappointment to the residents of the state. They have known for a long time that actual work was being done in Colorado, Arizona, Nevada, Idaho and Wyoming—every state and territory that touches Utah, to say nothing of states like California, Oregon and Montana. It is difficult to understand why Utah, the pioneer in irrigation in the entire nation, should be the last to be considered by the general government.

At the same time now that the way has been cleared for actual work there will be rejoicing all over the state. This rejoicing will be coupled with the hope that federal help will not stop with the Strawberry Valley project, but that the Utah Lake project, the Bear Lake project and the Weber River project will be taken up at once so that the aid of the government will be general; that it will be extended where it will benefit a large number of inhabitants and make homes possible for many thousands more.

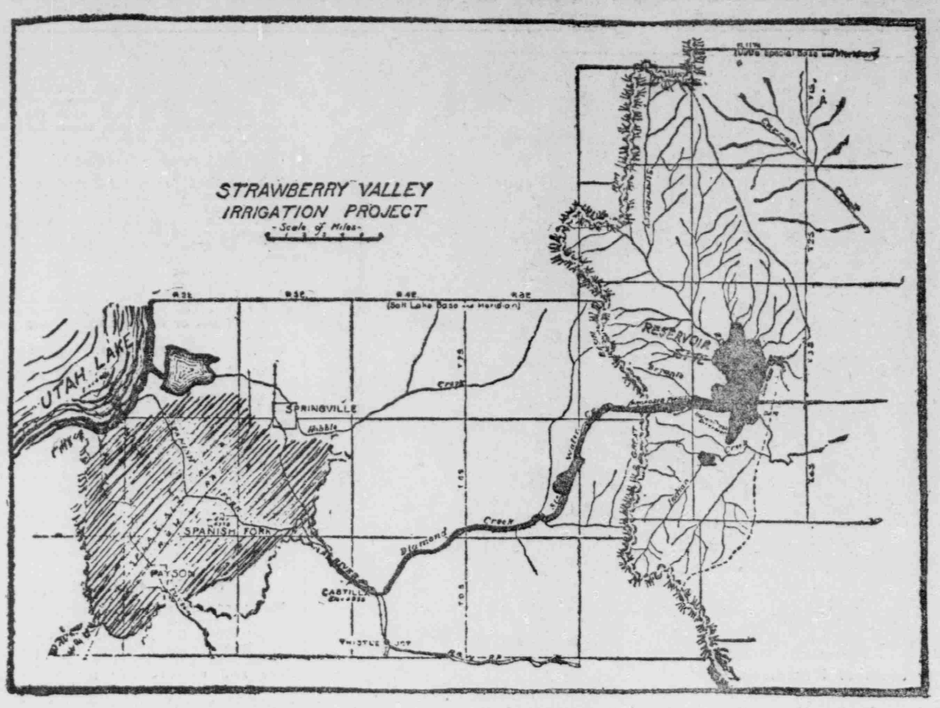
Good News From the East.

Dispatches from Washington, D. C., under date of Dec. 15, 1905, announced that Secretary E. A. Hitchcock had approved the Strawberry Valley project. This was done only after the matter had been considered by President Roosevelt and his cabinet. Secretary Hitchcock was opposed to the project. He was overruled in the matter. After a decision was reached $1,250,000 was set apart from the reclamation fund to pay for the work of carrying the Strawberry through the Wasatch mountains into Utah county. It was given out in Washington that the actual work of construction on the scheme will be started in the spring and that it will consume three years.

Nothing could be simpler than the Strawberry valley project. The stream is one of the feeders of the Colorado river. It drains some of the highest mountains in the Uintah range in eastern Utah. After leaving the mountains the stream passes through an extensive flat valley. Finally it forces its way through a narrow canyon between high hills. At this point it is designed to build a dam for the purpose of impounding the water. The valley makes a natural reservoir for this purpose. This impounded water is then to be carried through the Wasatch mountains by means of a tunnel. This tunnel will be sandstone all the way, a distance of 20,000 feet.

Through the Everlasting Hills.

By means of this tunnel under the Wasatch mountains the water is to be conveyed from the Strawberry on the east side of the range and emptied into Diamond creek on the west side. Diamond creek is a feeder for Spanish Fork. After the Strawberry water reaches this point it will be diverted by means of canals to irrigate lands now arid or semi-arid in the southern part of Utah county.



Some of the land is now partially irrigated by the Spanish Fork, Pason, Santaquin and Hobble creeks. With the aid of the Strawberry it is estimated that 50,000 acres of highly productive land will be fully irrigated.

Influential in bringing about the favorable action of the general government in this particular project was the Strawberry Valley Water Users' association of Utah county. Henry Gardner, of Spanish Fork, is at the head of the organization. Others who have played prominent parts are Joseph E. Greer of Lake Shore, Heber C. Jex, Fred Matley and Lars Neilson of Spanish Fork, William T. Tew of Mapleton, Hyrum Lemmon, J. S. McMeth and J. S. Page.

Farmers Get Together.

It became necessaary for the men holding primary rights to the water in the tract to be irrigated as well as those holding canal stock and others holding rights to the flood waters of the streams to pool their issues and get into a position where they could treat with the government as one man. They were also obliged to take the water from the Strawberry at so much per acre, approximately $40 an acre. This was to guarantee the return to the government of the $1,250,000 expended on the project. All this was accomplished and 1,152 of these farmers in Utah county entered into a contract to do all that was required of them by Uncle Sam. Their unanimity had much to do with the approval of the project by the president and his cabinet and the appropriation of the $1,250,000 required to accomplish the work.

All the preliminary work on the Strawberry valley project has been under the supervision of George L. Swendsen, who is in local charge of the United States geological survey work in Utah. This preliminary work it is announced is completed and the local office is prepared to go ahead with the actual construction work without further delay. Cold weather and snow in the mountains may retard operations until spring. It will be three years before the Strawberry water can be spread over the farms of Utah county.

Redeems a Little Empire.

Placing the maximum number of acres to be irrigated as the result of this project at 30,000 and placing the maximum value of the land after it is irrigated at $100, or $3,000,000 for the whole tract, it will still be seen that Utah is greatly the gainer through this assistance of the general government. So much of the land will be worth far more than $100 per acre.

All government irrigation projects in Utah other than this of the Strawberry valley are side-tracked indefinitely. A great amount of survey work has been done by government experts in recent years on the Utah lake project, the Bear lake project and the Weber river project. It was the hope and expectation that these projects could be carried along parallel lines, and that in this way a large majority of the population of the state could be made the beneficiaries of government aid in the working out of projects that are too large for private enterprise.

Hopes for Utah Lake Project.

It was conceded that the Utah lake project would benefit a greater number than any other project in the west for a like expenditure of money. Converting the lake into a great reservoir for the impoundin of the flood water of the streams flowing into it was pronounced feasible by the government experts. It was demonstrated that this additional water would irrigate a magnificent tract of land under the lake. The possibilities appealed to all who considered the scheme, and naturally the residents of this part of the state were enthusiastic for it. The work of combining the farmers and others who held primary rights into an association to deal with the government was well along when the word came down the line that the whole project had been abandoned for the time being.

The excuse given for this change of front was that there had been such heavy drafts upon the government reclamation fund by other states and territories that no large projects could be taken up in Utah until the reclamation fund was restored by the sale of land.

Thus the matter stands. It is clear that nothing will be done with the larger irrigation projects in Utah for a few years to come. F. H. Newell, chief hydrographer of the United States geological survey and perhaps the best posted and most influential man in the government service, asserts that the Utah lake project will be pushed to completion within a few years; that it is feasible in every way from an engineering point of view and that the interests of too many persons are at stake to permit the scheme to lapse. A little patience and judicious work on the part of the Utah delegation to congress will be required.

Private Work Goes on Merrily.

More than the usual amount of irrigation work by private persons and local corporations was done during the year. Water was filed upon in every stream, spring and lake in the state where it was thought water could be secured, either for power or irrigating purposes. In the Uintah reservation land thrown open to settlement the contest for water rights was exceptionally spirited. On the whole much was accomplished in different parts of the state to bring about the untilization of water now going to waste.

The record of filings on water in the office of the state engineer will exceed that of any other year in the history of the state. This in itself indicates increased enterprise on the part of the residents of the state. Of course part of this, and a good part of it, is due to the unusual activity in mining, the opening of new properties in different parts of the state.

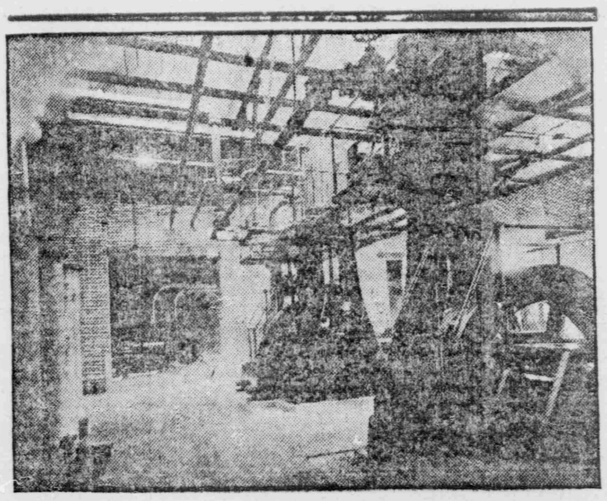
The Utah Ice & Cold Storage Company's Modern Plant

It is doubtful if the average Salt Laker fully realizes the number of new, modern and large manufacturing institutions of this city. The organization, recently, of a public body of prominent citizens to promote the number of manufacturing industries in Zion, was the occasion for a Herald man to go on a still hunt to ascertain exactly how the city was fixed in this particular regard. The result of one day's tour of investigation is given herewith, describing the altogether wonderful and expensive plant of the Utah Ice & Storage company.

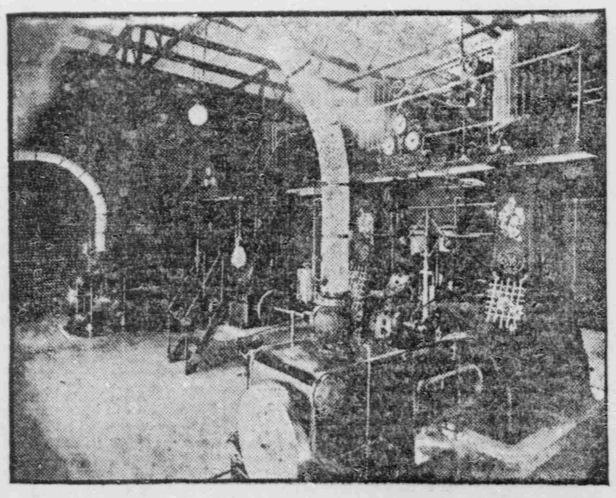
It would hardly be within the range of possibility to detail the plant in such a manner as to fully cover every item, but sufficient general description follows to give the average reader an idea as to the range of possibilities of the works and its principal features.

The plant is located on the corner of Fifth West and Third South streets, convenient to street car lines and easy of railroad access; the building is a nandsome two-story pressed brick structure with a frontage of 250 feet on Third South street and 150 feet on Fifth West street. The engine room is entered through the main entrance to the building on the Third South frontage. The equipment of this department consists of two immense machines, installed by the York Manufacturing company of York, Pa. The machines referred to are the ammonia compressors, having a combined capacity of 200 tons refrigeration every twenty-four hours. The boiler battery, which furnishes steam to the engines driving the compressors and various other machinery, has a capacity of 500 horsepower. The arrangement of engine and boiler room is complete and modern in every respect, ample room being provided for every contrivance and equipment. The power diision is one of the features that attracts visitors to the establishment, and is certainly an example of modern engineering and must be seen to be appreciated.

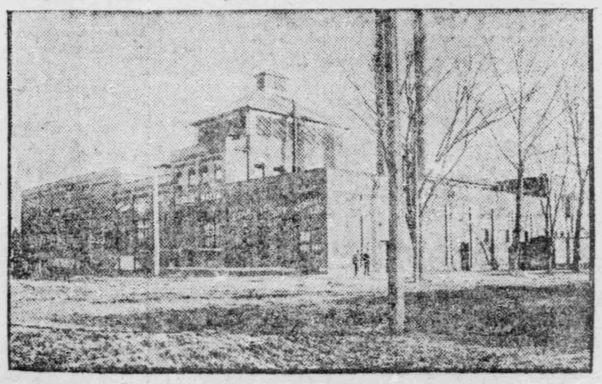
Entering the tank room from the engine room, you next inspect the two large freezing tanks which are constantly in use. Carefully distilled city water is frozen in these tanks, so that the manufactured product is free from disease germs of any description or other impurities usually found in natural ice.



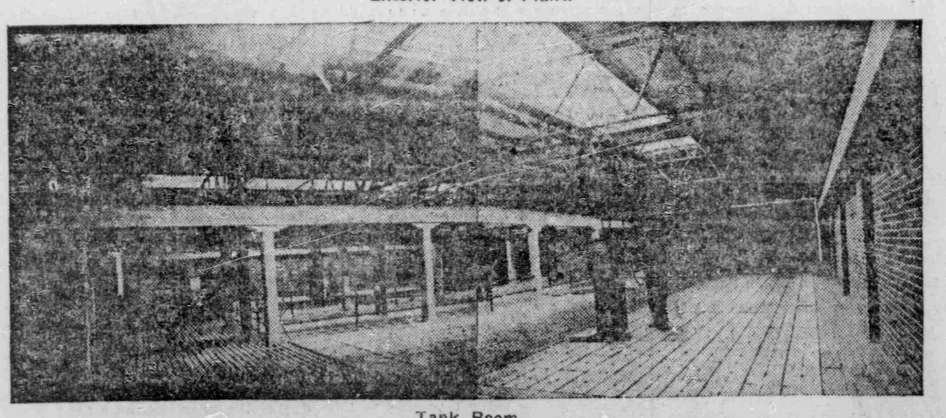
Engine Room, Showing Rear View of Ammonia Compressors.



Engine Room, Showing Front View of Ammonia Compressors.



Exterior View of Plant.



Tank Room.

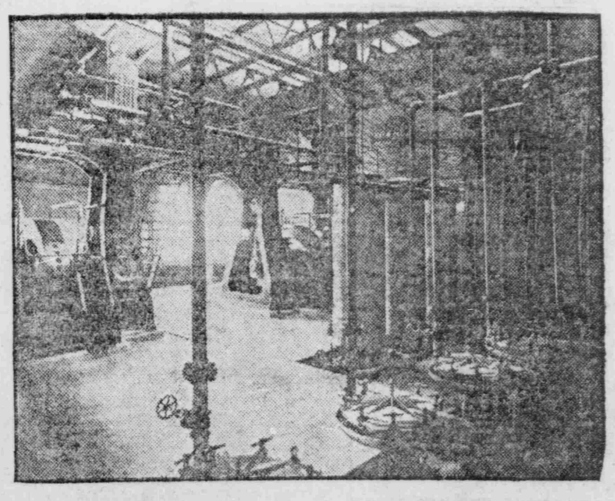
Forty-eight hours are required to freeze 800 such blocks, or an equivalent of 160 tons. The ice is next "harvested" and placed in a storage house, where the temperature is kept belo wthe freezing point to prevent melting. From the store house, the product is taken, either in wagons for city consumption or loaded on cars for outside shipment.

Perhaps the most important department of the plant is the cold storage department, and one to which the company pays particular attention. During the past season this department cared for thirty cars of eggs, twelve cars of butter, ten cars of cheese, and six or eight cars of miscellaneous products such as dried fruits, nut meats, etc. And of much importance to loyal Utahns is the fact that the great majority of these goods were of Utah production.

The egg coolers are provided with electric fans, which are in constant use to provide a good circulation of pure air, and are kept at an even temperature of 31 degrees.

In addition to its other mechanical equipment, the plant has its own electric light plant and supplies light, power and refrigeration to the Faust Creamery & Supply company and to Armour & Co. Both of the latter named concerns occupy part or the storage company's building.

The success which this enterprise has met since its establishment some two years ago may be more fully realized when it is stated that the improvements and addition now in process of construction comprise: An ice storage house of 4,500 tons capacity, which will be filled with manufactured ice during the winter months to provide a surplus to draw on during the heated summer term in addition to the daily capacity of the plant, which is 80 to 100 tons. The company is also building additional sharp freezers and coolers for butter and eggs, of which it makes a specialty, and at the present time is installing another refrigerating machine of 100 tons daily capacity, to care for the additional coolers and ice storage houses; showing that the policy of the company is to keep in advance of the requirements of the comunity, which is commendable, and thoroughly appreciated by all the merchants who handle perishable food products.



Engine Room, Showing Charcoal and National Filters in Foreground.

The management informed The Herald man that the company met with success from the very start—being a demonstration of what combined capital and energy can accomplish in this city. The ice plant was completed on July 1, 1903, and then a strong effort was made to interest local capital to complete the cold storage plant. And at that time the men who were seeking financial aid were informed that their project was ten years in advance of the needs of the city. This conservatism on the part of Salt Lake money gave the opportunity to the wealthy city of our sister state—Colorado Springs—and it is on money furnished by the enterprising capitalist of that city that the Utah Ice & Storage company has grown to its present state of completeness and unquestioned success.

The officers and stockholders are: William A. Otis, banker and multi-millionaire, president; E. J. Ullrich, capitalist, vice president and treasurer; M. F. Stark, well known in mining circles, director; M. S. Lewis, secretary, and William Prackwinkel, resident manager.